

ABSTRACT

The present invention is directed to wireless communication, and more particularly, to providing improved signal quality using antenna beam selection and/or switching techniques. Embodiments of the present invention may measure the carrier-to-interference (C/I) level for each channel and for each antenna. Embodiments of the present invention assign forward-link signals to antennas such that only one forward-link signal is transmitted from a respective antenna. Moreover, embodiments prioritize assignment to antennas by the forward-link power, i.e., the forward-link signal associated with the highest power is transmitted from the antenna associated with the best channel quality metric for reverse-link of the respective channel. Additionally, embodiments may employ the assignment scheme with antennas that possess spatial, polarization, and/or directional diversity to minimize the effects of shadow fading.

2007-02-20 10:20:00